

Industry/University Cooperative Research Center for a Solar Powered Future (SPF2050)

Bylaws

Article I – Introduction

1. The following Bylaws (“Bylaws”) will be used to govern the Center for a Solar Powered Future (“Center” or “SPF2050”), an Industry/University Cooperative Research Center (IUCRC) funded in part by the National Science Foundation (“NSF”).
2. The Bylaws have been approved by the Directors’ Board (consisting of the Center Director and the Site Directors for each site) and the Industrial Advisory Board (“IAB”). Any revisions to the ByLaws must be approved by the IAB and the Directors’ Board.
3. The Center is a university consortium comprised of research sites at The University of Texas at Austin (“Lead Site”), Colorado State University, Texas A&M University College Station, and Arizona State University (“Sites”). The Sites have executed a Memorandum of Understanding (“MOU”) to formally establish the roles and responsibilities of each Site. Each Site shall have their own Site Director that will communicate with the Lead Site’s Center Director.
4. These Bylaws form an integral part of the Membership Agreement (appended here as Exhibit A) signed by the participating Members. If there are any inconsistencies between the Bylaws and the Membership Agreement, the terms and conditions outlined in the Membership Agreement take precedence over the Bylaws and MOU.

Article II – Purpose of the Center

1. The vision and long-term goal of the Center for a Solar Powered Future (“Center” or “SPF2050”) is to help enable the United State and the world to achieve net zero carbon emissions by 2050 with the use of solar energy as a resource.
2. The Center is composed of an advisory board of industry, non-profit organizations, and government partners that funds and directs cutting-edge research to enable higher performance and lower-cost solar cells; improved reliability of PV components and systems; develop new or effective ways to recycle end-of-life solar panels; inform the creation of a circular solar powered economy; develop creative new approaches to land use in both rural and urban environments; integrate emerging storage technologies with solar power generation to alleviate problems of intermittency and variability; address techno-economic and socio-economic challenges; and identify new approaches to solar-powered electrification of industrial manufacturing, transportation and heating/cooling sectors.

Article III – Membership

1. Companies, non-profit organizations and government agencies shall become (“Members”) by paying a minimum of \$50,000 per year and executing the Membership Agreement. Members may contribute additional funds, entitling the Member to additional votes and project selection points as discussed in this agreement. Membership fees will be used to support “Center Research Projects.”
2. The Bylaws impose no obligation on Members to purchase sell, license, transfer or otherwise dispose of any technology, services or products. The Bylaws do not create any agency or partnership relationship.

Article IV – Organization and Administration

1. Industrial Advisory Board. The “Industrial Advisory Board” or “IAB” shall refer to a board comprised of one representative appointed by each Member.

The Industrial Advisory Board will select a Chair by majority vote for a two-year term and no less than every two years thereafter. The Industrial Advisory Board will select by majority vote a Vice-Chair to assist the Chair and to serve as Chair in his or her absence, or when a motion involving the Chair is being discussed. The Industrial Advisory Board Chair, the Center Director, and the Site Directors will work together as needed to manage Center activities.

2. IAB Chair and Vice-Chair. The IAB Chair and Vice-Chair will serve as the liaison between the IAB and both the Center leadership and the Center Assessment Coordinator. The Chair will be responsible for activities such as initiating changes to the bylaws and will serve as the voice of the IAB.

All Members will participate through the Industrial Advisory Board in the strategic planning of the Center. The Industrial Advisory Board will assist the Center Director, Site Directors, and participating faculty in identifying pre-competitive, industry-related, research problems; recommend research projects for future work; identify appropriate internship opportunities for graduate students; assist the Center Director and Site Directors in identifying new members; review the research and educational accomplishments of the Center; and recommend restructuring and/or redirecting of ongoing programs to meet Members' needs and concerns.

3. Center Director. The "Center Director" is appointed by the NSF and will be the primary decision-maker for the Center. The responsibilities of the "Center Director" shall be as outlined in the National Science Foundation Program Solicitation NSF 20-570 and MOU.
4. Site Directors. The "Site Directors" will be responsible for Center activities at their university and will report directly to the Center Director. The responsibilities of Site Director shall be as outlined in the National Science Foundation Program Solicitation NSF 20-0570 and MOU.
5. Center Assessment Coordinator. A "Center Assessment Coordinator," appointed by the National Science Foundation, will advise the Center Director, Site Directors and the Industrial Advisory Board. The Center Assessment Coordinator will provide an independent assessment of the operation of the Center and will report directly to the IUCRC Program Manager at the National Science Foundation.
6. IAB Governance. Each IAB member has one vote on policy decisions. A quorum for an IAB vote is two-thirds of the voting IAB Members or their proxies. In general, a simple majority outcome to a vote will carry an action, except for Bylaws changes, which require a two-thirds majority. Center Bylaws can be amended, at any time, per the recommendation of the IAB, Center Director and Site Directors. Any revisions to the Bylaws require approval by way of a two-thirds vote of the IAB Members. In the event, of a change outside of an IAB Meeting, the IAB Chair will reach out to the Members and initiate a vote.
7. Academic Leadership Team. The "Academic Leadership Team" will be comprised of the Center Director and Site Directors.
8. Academic Policy Committee. The "Academic Policy Committee" will be comprised of individuals at each Site that have authority to evaluate and put forth a decision about Conflict of Interest and personnel matters, as they arise. The Committee will be responsible for managing Conflict of Interest concerns and personnel performance issues within their respective sites. The

Committees at each respective Site have been outlined in the proposal submission to NSF. If membership changes are needed for the Academic Policy Committees at each Site, the Site may make such change as the need arises, but will notify the Lead Site of the change in membership.

Article V – Reports

1. Project research updates shall be provided on a quarterly basis to Members. Additional items may be disseminated via email and/or uploaded to the Center’s member section of the website at any time.

Article VI – Data Management

1. The Center’s Data Management involves archiving data, samples, and other research products, and for preservation of/access to them. The data and related materials will be stored and preserved in the Center’s digital repository. In aggregate, all the generated data will be stored, preserved, and made accessible at no cost to the project. The data sets, associated publications, and metadata will be deposited and preserved in the digital repository after project completion.

Article VII – Meetings

1. The Industrial Advisory Board will meet twice a year to review research results, select projects for recommendation, review budgets and discuss the strategic plans for the Center. An Industrial Member may send more than one representative to the Industrial Advisory Board Meetings, although standard voting rules apply (one point per thousand dollars of Membership dues contributed up to a maximum of 100 points).
2. Industrial Advisory Board Meetings are closed to the public because of the proprietary Center information that will be discussed. Attendance is limited to faculty, staff and students affiliated with the Center; representatives of Industrial Members and the Center Evaluator and other NSF personnel.
3. Non-Member visitors are able to attend Center meetings by executing a signed non-disclosure agreement (“NDA”). The Directors will inform the Members in advance of the meeting if a visitor plans to attend. The Lead Site will execute such NDAs between the Center and the non-member visitors.

Article VIII – Center Research Project Selection Procedures

1. The Center will only consider research projects that are not a duplicate of, or substantially similar to, federal awards received by the researchers participating in the Center’s activities.
2. The Center will provide one-page project proposal ideas to the IAB for review six weeks before the Fall IAB meeting.
3. The IAB will select Center Research Projects for funding from available Center-generated membership fees and will cooperate with the Directors to establish an annual budget for each project.
4. New projects will be selected at the Fall IAB meeting. The Center Director will provide a budget summarizing the Center’s income and expenditures. A single line item will indicate the total budget available to support new Center projects. Each Site will provide proposals for new research.
5. Funding decisions will be made by center directors based on the consensus of the IAB members.
6. An IAB member will not be allowed to vote on projects in absence of project review/selection meetings.
7. At the discretion of the IAB, a voting procedure may be used in which each IAB member is allocated 1 point per \$1,000 of Member fees paid up to a maximum of 100 points.

8. A member is allowed to use all of their points on one project, or distribute them among multiple projects as desired.
9. Each project that goes forward should have votes from at least 2 companies.
10. Before the vote is taken, the IAB will decide if the vote is binding or if it will be used merely as an indicator of the Board's research priorities. The IAB may elect to complete any number of non-binding votes but only one binding vote. If the IAB is not able to reach consensus, a binding vote will dictate which projects are funded.

Article IX – Patents, Copyrights, Licensing/Royalty Agreements and Publications

1. The Center will use a priority-driven ranking mechanism by which the IAB can recommend funding. (A voting method that allows one IAB Member to independently fully fund its project(s) of choice is viewed as supporting contract work and is disallowed under the I/UCRC framework).
2. If an invention or discovery is made resulting from a Center Research Project, the Principal Investigator with the coordination with the Site Director of that Project shall submit an invention disclosure:
 - a. UT Austin Office of Technology Commercialization ("OTC"): <https://research.utexas.edu/otc/>;
 - b. CSU: CSU Ventures http://www.csuventures.org/content.php?page_id=204;
 - c. TAMU College Station Texas A&M Technology Commercialization ("TTC"): <http://techtransfer.tamu.edu/index.shtml>;
 - d. ASU: Skysong Innovations <https://www.skysonginnovations.com/> .Site Director(s) shall distribute disclosures to currently paid Members.
3. Members shall have ninety (90) days from receipt of invention disclosure to notify in writing the disclosing University of Member's desire to enter into a non-exclusive royalty-free license. Members that wish to exercise rights to a royalty-free license agree to pay patent application and maintenance costs on a pro rata basis. In the event only one Member wishes to exercise their rights to the non-exclusive royalty-free license, that Member shall be fully responsible for any and all patent application and maintenance cost.
4. Patent eligibility is contingent upon having an active membership at the time of the invention. Members who join the Center after a disclosure has been filed are not eligible to the same patent rights as those Members who were active at the time of the invention's discovery. This also applies to Members who have lapsed membership and rejoin the Center at a later date.
5. If no Member intends to pursue a license, the disclosing University has rights to pursue intellectual property protection independent of the Center.
6. Draft manuscripts shall be provided to the IAB for review and comment prior to publication, the IAB will have sixty (60) days to review and provide comment. The IAB shall notify the Center Director and Site Directors within thirty (30) days of receipt of manuscript whether it desires the Center to file patent applications on any inventions contained in the manuscript to delay publication to protect confidential information or file patent applications on inventions, The IAB may request a period of ninety (90) days to delay publication for provisional patent filing.

Article X – New University Affiliates and Industrial Members

1. New universities or colleges may request membership in the Center. Each new university requesting membership must submit a "Letter of Intent" to the National Science Foundation to join the Center, and follow the I/UCRC program guidelines for acceptance into the Center. New universities or colleges, who wish to be a Site must agree to the Bylaws, Membership Agreement and terms of the MOU executed by the existing Sites.

2. New companies, non-profit organizations, federal research and development organizations, government owned contractor operated laboratories or small businesses concerns may request, or be requested, to join the Center as a Member. These new organizations may join the Center upon signature of the applicable Membership Agreement, acceptance of the current Bylaws and payment of the non-prorated annual membership fees as detailed in Article III. 1. Application of these new membership fees may be made to existing research programs, used to create a new research project or held in reserve until the next IAB Meeting.

Article XI – Termination of Members and University Sites

1. Per the Membership Agreement, Members are able to terminate their membership within the Center, by providing 90-day written notice to the Center. If an existing Member has provided notice its renewal payment is forthcoming, they have a 90-day window after notification before their membership is considered lapsed. Members whose membership is considered lapsed do not have access to IP that has been generated until such point that they have paid their renewal fee.
2. University Sites can terminate its involvement in the Center with the advisement of the NSF Program Manager and Evaluator and in accordance with its NSF Grant Award, the solicitation (NSF 20-0570) and MOU.